

3. (Amended) Reception device according to claim 1, characterized in that said adapted estimated value is computed as follows:

$$\hat{x}_{Adap,n} = \left(\sum_{i=1}^N cnfd_{i,n} \times \hat{x}_{i,n} \right) / \left(\sum_{i=1}^N cnfd_{i,n} \right)$$

where:

\hat{x}_n is the estimated value of the symbol received on the path i ;

$cnfd_{i,n}$ is the corresponding path confidence information element; and

N is the number of paths.

4. (Amended) Reception device according to claim 1, characterized in that, said adaptive confidence information element is computed as follows:

$$cnfd_{Adap,n} = \sum_{i=1}^N cnfd_{i,n}$$

where:

$cnfd_{i,n}$ is the confidence information element associated with the path i ; and

N is the number of paths.

5. (Amended) Reception device according to claim 1, characterized in that it implements at least two antennas (101₁, 101₂), supplying distinct reception paths.

6. (Amended) Reception device according to claim 1, characterized in that each of said reception paths comprises a first module shaping and demodulating the received

91
signal and a second module determining said estimated path values and said corresponding confidence information elements,

said device furthermore comprising a single module supplied by said second modules, and providing especially for the combination (11) delivering said adapted estimated values and a weighted-input decoding (12) supplied by said adapted estimated values.

8. (Amended) Use of a device and/or of the method according to claim 1 and/or of the method for the reception of a multicarrier signal, formed by a set of carrier frequencies transmitted simultaneously, implementing at least two reception paths supplied with data flows, each conveying the same source symbols, each of said paths implementing a step of estimation of the transmission channel associating, with each source symbol received, an estimated path value and a corresponding path confidence information element,

92
a source symbol being conveyed by a subset of said set of carrier frequencies, characterized in that it comprises:

- a combination step delivering:
- an adapted estimated value, obtained from said estimated path values in taking account of said path confidence information to weight said estimated path values ; and
- an adapted confidence information element with each of said adapted estimated values, as a function of said path confidence information elements,
- a step of weighted-input decoding, supplied by said adapted estimated values, for the reception of data belonging to at least one of the following applications: